G.J. CHEMICAL COMPANY, INC. SAFETY DATA SHEET

1. PRODUCT IDENTIFIER

1.1 PRODUCT NAME:-----> n-Propanol (all grades)

PRODUCT NUMBER(S):----> 209900, 209910, 209960

TRADE NAMES/SYNONYMS:-----> n-Propyl Alcohol, 1-Propanol, Propylic alcohol, Ethyl Carbinol

CAS-No: 71-23-8 CHEMICAL FAMILY: Alcohols

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

RECOMMENDED USE: Industrial: Use in lubricants, Manufacture of substances. Use in inks and coatings, Use in cleaning agents, Metal working fluids, rolling oils, Use as an intermediate, Use as a solvent, Laboratory chemicals. USES ADVISED AGAINST: No information available.

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Company: G.J. CHEMICAL CO., INC.

Address: 40 VERONICA AVENUE

SOMERSET, NJ 08873

Telephone: 1-973-589-1450 Fax: 1-973-589-3072

1.4 Emergency Telephone Number

Emergency Phone: 1-800-424-9300 (CHEMTREC)

2. <u>HAZARDS IDENTIFICATION</u>

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29CFR 1910
Flammable liquids (Category 2), H225
Serious eye damage (Category 1), H318
Specific target organ toxicity - single exposure (Category 3) Central Nervous System, H336

2.2 GHS Label elements, including precautionary statements



Pictogram

Signal word: DANGER

Hazard statement(s)

H225 Highly flammable liquid and vapor.

H318 Causes serious eye damage.

H336 May cause drowsiness or dizziness.

Precautionary statement(s)

Prevention:

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS: None

3. <u>INGREDIENTS</u>

3.1 SUBSTANCE:

Ingredient	CAS No.	% by Range	
N-Propyl Alcohol	71-23-8	99.8	Flammable liquids (Category 2), H225
EC-N	o.200-746-9	1	Serious eye damage (Category 1), H318
Index-No. 6	803-003-00-0	1	STOT-SE (Category 3) Central Nervous
RegNo. 01-2119486	761-29-XXXX	Ì	System, H336

3.2 MIXTURE: Not applicable.

4. FIRST-AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES:

INHALATION: n-Propyl Alcohol

**<u>FIRST AID-</u> Remove from exposure to fresh air, restore breathing use oxygen if needed. Keep warm and quiet. Immediately notify a physician.

EYE CONTACT (Splash): n-Propyl Alcohol

**FIRST AID- Immediately flush eyes with water for 15 minutes. Hold eyelids open for complete irrigation. Remove contact lenses, if worn, after initial flush. Immediately take to a physician.

SKIN CONTACT(Splash): n-Propyl Alcohol

**FIRST AID- Wash affected area with soap and large amounts of water. Remove contaminated clothing and shoes. Consult a physician if irritation persists.

INGESTION: n-Propyl Alcohol

**<u>FIRST AID- Induce vomiting immediately, of conscious patient, as directed by medical personnel</u>. Patient should be made to drink large amounts of water. Never give anything by mouth to an unconscious person. Consult a physician or poison control center, treat symptomatically.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED: Eye> May cause eye irritation; Symptoms include burning sensation, pain, watering and/or change of vision.

<u>Skin</u>: Mildly irritating; Symptoms include cracking, drying and inflammation of skin.

<u>Inhalation</u>: Irritation of the respiratory tract. Nasal discharge, coughing, shortness of breath, dizziness and intoxication.

<u>Ingestion</u>: May be harmful if swallowed, Causes mouth and throat irritation. Can

cause central nervous system depression, nausea, dizziness, headache and stupor in addition nausea, vomiting, loss of appetite, gastrointestinal irritation and/or diarrhea.

<u>Chronic</u>: Central nervous system depression, injury to the eyes, irritation of the respiratory tract. Skin damage.

Medical Conditions Aggravated by Exposure: Skin contact may aggravate an existing dermatitis. May aggravate mucous membrane dysfunction. May adversely affect people with chronic disease of the eye, skin, liver and respiratory tract.

<u>Target organ effects</u>: Overexposure may cause, Central nervous system depression, Injury to eyes, irritation of the respiratory tract, and skin damage.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

Specific details on antidote: No recommendation given.

5. FIRE FIGHTING MEASURES

Flash Point: 22°C (72°F) TCC LEL %:2.1 (V)
Auto-ignition Temp: 412.78°C (775°F) UEL %:13.7 (V)

UNIFORM FIRE CODE: Flammable Liquid Class 1A

5.1 <u>SUITABLE EXTINGUISHING MEDIA</u>: DRY CHEMICAL, CARBON DIOXIDE, WATER SPRAY OR ALCOHOL-RESISTAN FOAM. FOR LARGER FIRES, USE WATER SPRAY, FOG OR ALCOHOL-RESISTANT FOAM, or ALCOHOL FOAM Unsuitable extinguishing media: Do not use waterjet.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

FIRE AND EXPLOSION HAZARD: DANGEROUS FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL A CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASH BACK. VAPOR-AIR MIXTURES ARE EXPLOSIVE.

Keep containers tightly closed. Flammable liquid; isolate from all sources of ignition. Closed containers may explode when exposed to extreme heat. Liquid floats on water.

<u>CONDITIONS OF FLAMMABILITY</u>: Flammable in the presence of a source of ignition when the temperature is above the flash point.

<u>HAZARDOUS COMBUSTION PRODUCTS</u>: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, carbon oxides and other unidentified organic compounds evolve when this material undergoes combustion.

5.3 ADVICE FOR FIREFIGHTERS: Shut off source. Keep unnecessary people away; isolate hazard area and deny entry. Avoid breathing vapors, stay upwind Do not spray pool fires directly. A solid stream of water or foam directed into hot burning liquid can cause frothing. Move container from fire area if you can do it without risk. Apply cooling water to sides of containers that are exposed to flames until well after fire is out. For massive fire in cargo area, use unmanned hose holder or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire. Water fog may be used to cool closed containers to prevent pressure build up and possible auto ignition or explosion when exposed to extreme heat. Cool containers with waterfog from as far a distance as possible. Wear NIOSH approved self-contained breathing apparatus for confined spaces. Use full fire-fighting protective clothing. If protective equipment is not available or not used, fight fire from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES

6.1 <u>PERSONAL PRECAUTIONS</u>, <u>PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES</u>: Extremely Flammable; Eliminate ignition sources in the vicinity of the spill or released vapor. Immediately evacuate all nonessential people. Verify that responders are properly trained and wearing appropriate respiratory equipment and fire resistant protective clothing during cleanup operations. For large spills evacuate downwind areas as conditions warrant to prevent exposure and to allow vapors or fumes to dissipate.

6.2 ENVIRONMENTAL PRECAUTIONS:

Keep out of water sources and sewers. Do not flush into surface water or sanitary sewer system

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:

Methods for cleanup and containment:

Use explosion proof equipment. Shut off valves, contain spill, for small spills add non-flammable absorbent in spill area. For large spills use foam on spill to minimize vapors clean up by vacuuming then using non-flammable absorbent. Methods for disposal:

Place all saturated absorbent, using non-sparking tools, in an approved container for disposal. Minimize breathing vapors and skin contact, ventilate confined areas, open all windows and doors, assure conformity with applicable government regulations.

6.4 REFERENCE TO OTHER SECTIONS: See Sections 8 and 13.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING: This material presents a fire hazard. Liquid quickly evaporates and forms vapor (fumes), which can catch fire and burn with explosive violence. Invisible vapor spreads easily and can be set on fire by many sources, such as pilot lights, welding equipment, and electrical motors and switches. Vapor is heavier than air and can travel considerable distance to a source of ignition and flash back. Avoid breathing vapors in top of shipping container. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid work practices that may release volatile components in the atmosphere. Avoid contaminating soil or releasing material into sewage and drainage systems. Use non-sparking tools to open or close containers.

Advice on general occupational hygiene:

Wash hands before breaks and after work. Keep away from food, drink and animal feeding stuffs. When using do not smoke.

STATIC HAZARD: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not be sufficient. For more information refer to OSHA Standard 29CFR 1910.106 "Flammable and Combustible Liquids" and National Fire Protection Association (NFPA 77) "Recommended Practice on Static Electricity".

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: Follow maximum allowed pile heights specified in the BOCA codes or the NFPA manual. Local fire authorities should be notified for storage of this material in any quantity. Local permits are required for storage in warehouse quantities. Recommended storage temperature: 15 - 25°C. Store large quantities only in cool, dry areas in buildings designed to comply with OSHA 1910.106. Keep containers tight and upright to prevent leakage. Do not contact with oxidizing materials. Keep containers closed when not in use. Do not take internally. Storage class (TRGS 510): 3: Flammable liquids

<u>CONTAINER WARNINGS:</u> Containers should be Bonded and Grounded when pouring. Avoid free fall of liquid in excess of a few inches. Empty containers release residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, or expose such containers to heat, sparks, static electricity or other sources of ignition. Do not attempt to clean. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum reconditioner.

7.3 SPECIFIC END USES: Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROL (PERSONAL PROTECTION)

8.1 CONTROL PARAMETERS:

Ingredient	CAS No.	% by WT. Range	Exposure Limits

N-Propanol	71-23-8	99.8	100ppm (TWA ACGIH
	EC-No.200-746-9	į	200ppm (TWA) NIOSH
	Index -No. 603-003-00-0	į	200ppm (TWA) OSHA
RegN	o. 01-2119486761-29-XXXX	į	250ppm (STEL) OSHA
			800ppm IDLH
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Key: (PEL) = Permissible Exposure Limit OSHA (TLV) = Threshold Limit Value OSHA & ACGIH (STEL) = Short Term Exposure Limit ACGIH

(WEEL) = USA. Workplace Environmental Exposure Levels

(TWA) = Time Weighted Average

CAS = Chemical Abstracts Registry Number IDLH = Immediate Danger to Life and Health

N.E. =None Established

8.2 EXPOSURE CONTROLS

EXPOSURE GUIDELINES: Consider the potential hazards of this material (Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended.

<u>ENGINEERING CONTROLS</u>: Provide general dilution or local exhaust ventilation in volume and pattern to keep concentrations within permitted exposure limits. All areas should be ventilated in accordance with OSHA Regulation 29 CFR Part 1910. Explosion proof motors should be used in mechanical ventilation.

RESPIRATORY PROTECTION: The specific respirator selected must be based on contamination levels found in the work place, must not exceed the working limits of the respirator and be jointly approved by the National Institute for Occupational Safety and Health and the Mine Safety and Health Administration (NIOSH-MSHA): For vapor concentrations 1 to 10 times ACGIH TWA use an air purifying NIOSH/MSHA Approved respirator with full face-piece and organic vapor cartridges. For concentrations over 10 times ACGIH TWA, in confined areas, and/or where vapor concentrations are unknown use a NIOSH/MSHA approved positive pressure full face-piece supplied air respirator (SCBA).

<u>BODY CLOTHING</u>: Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged contact with this substance. Use chemical resistant apron or other impervious clothing. Remove and wash contaminated clothing before reuse.

SKIN PROTECTION: Employee must wear appropriate protective gloves to

prevent contact with this substance. Full contact Material: Nitrile rubber Minimum layer thickness: 0.4 mm Break through time: 480 min

Splash contact Material: Nitrile rubber

Minimum layer thickness: 0.2 mm

Break through time: 72 min

<u>HYGIENE</u>: Use good personal hygiene practices, wash hands before eating, drinking, smoking or using toilet facilities.

<u>EYE/FACE PROTECTION</u>: Use safety eyewear with splash-guards or face shield. Contact lenses should not be worn.

Emergency shower and eyewash should be easily accessible to the work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

N-Propyl Alcohol 71-23-8

Appearance-----> Clear mobile liquid

Color----> Colorless

Odor-----> Mild alcohol odor. Odor does not persist

after alcohol has evaporated.

Odor Threshold-----> No data available

pH-----> 8.5 at 200 g/l at 20°C (68°F)

Molecular Weight-----> 60.10amu

Melting/Freezing Point----> -127°C (-197°F)

Boiling Range -----> 97°C (207°F)

Specific Gravity-----> 0.8053 @20°C

Vapor Pressure-----> 14.5 mmHg@20°C (68°F)

Vapor Density (air=1)----> 2.07

Water Solubility-----> 100%@20°C

Partition Coefficient n-Octanol/Water-> log Pow: 0.25 - 0.34

Evaporation Rate (Butyl Acetate=1)----> 1.3

Flash Point-----> 22°C (72°F) - closed cup

Upper Flammability Limit-----> 13.7% (V)

Lower Flammability Limit-----> 2.1% (V)

Auto-Ignition Temperature-----> 412.78°C (775°F)

Decomposition Temperature-----> No data available

Viscosity-----> No data available

Explosive Properties-----> No data available

Oxidizing Properties-----> No data available

9.2 Other Information-----> No data Available

10. STABILITY AND REACTIVITY INFORMATION

10.1 **REACTIVITY**: No data available.

10.2 CHEMICAL STABILITY: Unstable () Stable (X)

10.3 <u>POSSIBILITY OF HAZARDOUS REACTIONS:</u> Vapors may form explosive mixtures with air.

HAZARDOUS POLYMERIZATION: May occur () Will not occur (X)

- 10.4 <u>CONDITIONS TO AVOID</u>: Heat, Sparks, Pilot Lights, Static Electricity, and Open Flame.
- 10.5 <u>INCOMPATIBLE MATERIALS</u>: Strong oxidants such as liquid chlorine, oxygen, sodium hypochlorite, inorganic acids e.g. nitric acid, perchloric acid and hydrogen peroxide.
- 10.6 <u>HAZARDOUS DECOMPOSITION PRODUCTS</u>: Fumes, Smoke, Carbon Monoxide, Aldehydes and other decomposition products where combustion is not complete.

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

Routes of Entry: Inhalation--> x Skin--> x Ingestion--> x Eye--> x

ACUTE HEALTH EFFECTS:

Effects of overexposure:

Eye> May cause eye irritation; Symptoms include burning sensation, pain, watering and/or change of vision.

Skin> Mildly irritating; Symptoms include cracking, drying and inflammation of skin.

Inhalation> Irritation of the respiratory tract. Nasal discharge, coughing, shortness of breath, dizziness and intoxication.

Ingestion> May be harmful if swallowed, Causes mouth and throat irritation. Can cause central nervous system depression, nausea, dizziness, headache and stupor in addition nausea, vomiting, loss of appetite, gastrointestinal irritation and/or diarrhea.

Chronic: Central nervous system depression, injury to the eyes, irritation of the respiratory tract. Skin damage.

Medical Conditions Aggravated by Exposure> Skin contact may aggravate an existing dermatitis. May aggravate mucous membrane dysfunction. May adversely affect people with chronic disease of the eye, skin, liver and respiratory tract.

Target organ effects: Overexposure may cause, Central nervous system depression, Injury to eyes, irritation of the respiratory tract, and skin damage.

ACUTE TOXICITY:

The effects of overexposure shown in Section II are based on acute toxicity profiles. Typical values are:

Ingredient	Oral LD50 (Rat)	Skin LD50 (Rabbi	t) Inhalation LC50	
n-propanol				
	8038mg/kg	4000mg/kg	20000ppm/1hr	

SKIN CORROSION/IRRITATION: Skin - Rabbit Result: No skin irritation - 24 h (OECD Test Guideline 404)

SERIOUS EYE DAMAGE/EYE IRRITATION: Eyes - Rabbit Result: Severe Eye Irritation 24 h (OECD Test Guideline 405)

RESPIRATORY OR SKIN SENSITIZATION: Maximization Test - Guinea pig Result: Did not cause sensitization on laboratory animals.

MUTAGENIC EFFECTS: In Vitro is negative in most tests; In vivo, no evidence

CARCINOGEN STATUS:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

REPRODUCTIVE TOXICITY: Teratogenic - No evidence of birth defects.

Reproductive - May cause adverse reproductive effects based on animal data.

Specific target organ toxicity (STOT-SE)- single exposure (Globally Harmonized System): May cause drowsiness or dizziness.

Specific target organ toxicity (STOT-RE)- repeated exposure (Globally Harmonized System): no data available

ASPIRATION HAZARD: No data available

11.2 ADDITIONAL INFORMATION: Central nervous system depression, prolonged or repeated exposure can cause:, narcosis, Skin irritation

RTECS: UH8225000

12. **ECOLOGICAL INFORMATION**

Propanol exhibits low acute toxicity to aquatic species.

12.1 AQUATIC TOXICITY (Acute):

Toxicity to fish:

LC50 - Pimephales promelas (fathead minnow) 4100-5000ppm - 96 h

LC50 - Oncorhynchus mykiss (rainbow trout) 3200ppm - 96 h

(OECD Test Guideline 203)

Toxicity to daphnia and other invertebrates:

LC50 - Daphnia magna (water flea) 3642-8150ppm - 48 h

LC50 - brine shrimp - 4200ppm - 24 h

Toxicity to microorganisms:

EC50 - Pseudomonas putida (bacteria) - 2700ppm - 24 h

Toxicity to algae:

EC50 - Scenedesmus quadricauda (green algae) 3100ppm - 24 h

- 12.2 PERSISTANCE AND DEGRADABILITY: Propanol is readily biodegraded. BOD 5day 60% or greater degradation. After 20 days, 98.8% degradation has been reported. The estimated volatilization half-life in water is 6.5 days. The half-life for atmospheric degradation via hydroxyl radicals is estimated to range from 2.6 to 6.7 days. Ratio BOD/Theoretical BOD < 2 %
- 12.3 <u>BIOACCUMULATIVE POTENTIAL:</u> Propanol has low potential to bioaccumulate in aquatic organisms. Log octanol/water partition coefficient of log Pow 0.25-0.34

Bio-concentration Factor (BCF): 0.7

12.4 MOBILITY IN SOIL: No data available.

12.5 RESULTS OF PBT AND vPvB:

PBT assessment results: This substance is not classified as PBT or vPvB.

12.6 OTHER ADVERSE EFFECTS: No data available.

13. <u>DISPOSAL CONSIDERATIONS</u>

13.1 <u>WASTE TREATMENT METHODS:</u> Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly it is the responsibility of the user to determine the proper storage, transportation, treatment and or disposal methodologies for spent materials and residues at time of disposition. Dispose in accordance with all applicable disposal regulations. Incinerate under controlled conditions in a permitted facility.

CONTAMINATED PACKAGING: Dispose of as unused product

The information offered here is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

RCRA: The unused product is a RCRA hazardous waste if discarded. The RCRA ID number is: D001.

If the waste is a spent solvent, the appropriate spent solvent code should be used.

DISPOSAL MUST BE IN ACCORDANCE WITH STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE, 48 CFR 262

14. TRANSPORT INFORMATION

Land	d Transport (DOT)
14.1	USDOT ID Number> UN1274
14.2	USDOT Shipping Name> n-Propanol
14.3	USDOT Hazard Classification> 3 (Flammable Liquid)
	USDOT Label Codes> 3
14.4	USDOT Package Code> II
14.5	Marine Pollutant> No
14.6	Special precautions for user> Yes
	Emergency Response Guide> 129
Sea	Transport (IMDG)
14.1	ID Number> UN1274
14.2	Proper shipping name> n-PROPANOL
14.3	Hazard Classification> 3 (Flammable Liquid))
	Label Codes> 3
14.4	Package Code> II
14.5	Marine Pollutant> No
14.6	Special precautions for user> Yes
	EMS-Number> F-E, S-D
Air T	ransport (IATA)
14.1	ID Number> UN1274
14.2	Proper shipping name> n-Propanol
	Hazard Classification> 3 (Flammable Liquid) Label Codes> 3
14.4	Package Code> II
	Environmental hazard> None
14.6	Special precautions for user> No

15. **REGULATORY INFORMATION**

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE:

SARA TITLE III (Superfund Amendment and Reauthorization Act)

SECTION 302 AND 304: Extremely Hazardous Substance List (40 CFR 355) - Not Listed

SECTION 313: Toxic Chemicals Listing (40 CFR 372.65) - Not Listed

SECTION 311/312: Hazard Categorization (40 CFR 370)- Acute Health Hazard,

Chronic Health Hazard, and Fire Hazard

<u>CERCLA</u> (Comprehensive Environmental Response, Compensation, and Liability <u>Act</u>)

SECTION 102(A) Hazardous Substances (40 CFR 302.4) - Not Listed Reportable Quantity - None

SECTION 101(14) Reportable Quantity: None

Massachusetts Right to Know Components n-Propanol CAS-No.71-23-8

Pennsylvania Right to Know Components n-Propanol CAS-No.71-23-8

New Jersey Right to Know Components n-Propanol CAS-No.71-23-8

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

TSCA (Toxic Substance Control Act)

n-Propanol CAS-No.71-23-8 is listed on the TSCA Inventory.

International Inventories:

Country or Region	Inventory Name On inventory y	<u>es/no</u>
<u>Australia</u>	Australian Inventory of Chemical Substances (AICS)	Yes
<u>Canada</u>	Domestic Substances List (DSL)	Yes
<u>Canada</u>	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemicals	Yes
	Substances (EINECS)	
<u>Europe</u>	European List of Notified Chemical Substances (ELINCS)	No
<u>Japan</u>	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Japan	Industrial Safety & Health Law Inventory (ISHL)	Yes
Korea	Existing Chemicals List (ECL)	Yes
Mexico	National Inventory of Chemical Substances (INSQ)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances	Yes
	(PICCS)	
<u>Switzerland</u>	Inventory of Notified New Substances (CHINV)	Yes
<u>Taiwan</u>	National Existing Chemical Inventory (NECI)	Yes
United States &	Toxic Substances Control Act Inventory	Yes
Puerto Rico		

15.2 CHEMICAL SAFETY ASSESSMENT: A chemical safety assessment has been carried out for this substance.

16. OTHER INFORMATION:

HMIS (Hazardous Materials Identification System)

Hazard Rating:

4-Extreme

3-High

2-Moderate

1-Slight

0-Insignificant

NFPA RATINGS (SCALE 0-4): Health=2 Fire=3 Reactivity=0

HMIS RATINGS (SCALE 0-4): Health=2 Fire=3 Reactivity=0 PPE=X

Hazard statement(s) from Section 2 and 3:

H225 Highly flammable liquid and vapor.

H318 Causes serious eye damage.

H336 May cause drowsiness or dizziness.

Date of preparation----> June 24, 2005

Revision Number----> 1.7

Revision Content-----> Updated Sections: 1, 3, 4, 5, 7, 8, 10, 11, and 16

Revision Date-----> April 12, 2019

Prepared by-----> T.G. Fenstermaker, Jr.

Acronyms:

ACGIH - American Conference of Governmental Industrial Hygenists

AIHA - American Industrial Hygiene Association
ANSI - American Nation Standards Institute

API - American Petroleum Institute

CERCLA - Comprehensive Emergency Response, Compensation, and Liability Act

DOT - U.S. Department of Transportation
EPA - U.S. Environmental Protection Agency
HMIS - Hazardous Materials Information System
IARC - International Agency For Research On Cancer

MSHA - Mine Safety and Health Administration NFPA - National Fire Protection Association

NIOSH - National Institute of Occupational Safety and Health

NOIC - Notice of Intended Change (Proposed change to ACGIH TLV)

NTP - National Toxicology Program
OPA - Oil Pollution Act of 1990

OSHA - U.S. Occupational Safety & Health Administration

PEL - Permissible Exposure Limit (OSHA)
RCRA - Resource Conservation and Recovery Act
REL - Recommended Exposure Limit (NIOSH)

SARA - Superfund Amendments and Reauthorization Act of 1986 Title III

SCBA - Self-Contained Breathing Apparatus

STEL - Short-Term Exposure Limit (generally 15 minutes)

TLV - Threshold Limit Value

TSCA - Toxic Substances Control Act
TWA - Time Weighted Average (8hr.)

WHMIS - Canadian Workplace Hazardous Materials Information System

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